



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/217,932	12/22/1998	EN-SEUNG KANG	P55501	3765

7590 04/16/2003

ROBERT E BUSHNELL
1522 K STREET, N.W.
SUITE 300
WASHINGTON, DC 20005-1245

EXAMINER

ZAND, KAMBIZ

ART UNIT PAPER NUMBER

2132

DATE MAILED: 04/16/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: ASSISTANT COMMISSIONER FOR PATENTS

Washington, D.C. 20231

APPLICATION NO./ CONTROL NO. <i>2132</i>	FILING DATE <i>12/22/98</i>	FIRST NAMED INVENTOR <i>En-Seung King</i> PATENT IN REEXAMINATION	ATTORNEY DOCKET NO. <i>P55501</i>
---	--------------------------------	--	--------------------------------------

EXAMINER <i>Kambiz Zand</i>	
ART UNIT <i>2132</i>	PAPER <i>12</i>

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

In response to the decision on petition to withdraw holding of restriction requirement mailed on April 14th, 2003 regarding the last Office action, the following corrective action is taken.

The period for reply of 3 MONTHS set in said Office Action is restarted to begin with the mailing date of this letter.

Office Action Summary

Application No.

09/217,932

Applicant(s)

KANG ET AL.

Examiner

Kambiz Zand

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
- 4a) Of the above claim(s) 1-19 and 34-69 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-33 is/are rejected.
- 7) ☒ Claim(s) 31 and 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: 90c.

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this section can be found in the prior office action.
2. The prior office actions are incorporated herein by reference. In particular, the observations with respect to claim language, and response to previously presented arguments.
3. Applicant provisionally elects, with traverse, the invention of Group II, claims 20-33.
4. Claims 1-19 and 34-69 are withdrawn from examination.
5. Claims 20-33 are pending.

Response to Traverse

6. In response to the decision on petition to withdraw the finality of the restriction requirement mailed on April 14th, 2003, full and clear reasons for upholding the restriction is being presented as follow:
 - Group I has separate utility since this group requires a server that transmits to a terminal unit the encrypted contents and a key (the key being formed at the server), i.e., systems where the data protection involves key distribution and storing.

- Group II has separate utility since this group does not require any transmission of encrypted contents or a key. This group is available for use in systems where neither the content nor the key need be transported from server to user. This could read on a prerecorded DVD, while the previous Group I reads on a connected client/server arrangement or on-line connection.
- Both groups share a common and broad utility, i.e., protecting digital contents by encryption, but each group has separate utility by being useable in different and varied environments.
- The argument that group I and II should both be commonly classified, is not agreed to since the inclusion of the key formation at the server and transmission to a terminal unit where it is stored results in a different system configuration.
- In the encrypted art, where and how systems generate or form the encryption key, and the distribution of this key, creates systems with distinct and separate status. For example, Group II has no requirement for key distribution and storing and thus may apply in a DVD player. While Group I has transmission and storing of a key that necessitates a connected system such as a server/client or on-line arrangement. The classification of the two groups in different subclasses is proper due to the differences in where and how a key is formed and transmitted, insofar as the encryption art is concerned.
- The traversal of restriction requirement of Group V is based on the argument that the classification is improper since Group V has no recitation of VIDEO.

However, claims may be read light of disclosure and page 7, lines 9-14 discloses digital TV. Digital TV systems have related structure and function regarding content protection, i.e., pay per view or Video-On-Demand.

- The traversal of restriction requirement of Group VII is based on the argument that the classification is improper since Group VII has no recitation of VIDEO. However, claims may be read light of disclosure and page 7, lines 9-14 discloses digital TV. Digital TV systems have related structure and function regarding content protection, i.e., pay per view or Video-On-Demand.
- The restriction of Group VII is also traversed on the grounds that certain limitations of this group are also found in Group I. However, Group VII is clearly directed to a replaying device. Such a system has separate utility such as a digital recorder not requiring key transmittal as necessitated in Group I.
- The traversal of Group III and IV is based on the lack of serious burden on the Examiner. However, three reasons indicating serious burden that have been listed as applicable. Each group requires a separate field of search, each group has acquired a distinct status in the art and each is classified differently.
- No reason for traversal of Group VI is specifically given. However, assuming that Applicant is concerned with the classification alleged by the Examiner, the

Art Unit: 2132

reasons for restriction as noted with respect to Group V and VII are repeated with respect to this group.

- 7. In response to the decision on petition to withdraw the finality of the restriction requirement mailed on April 14th, 2003 regarding the last Office action, the following corrective action is taken.**

The period for reply of 3 MONTHS set in said Office Action is restarted to begin with the mailing date of this letter.

Drawings

8. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description Page 7, line 9, item "11a"; line 17-18, 26-27 and 30, item 11b; page 8, line 19, item 21b; page 18, line 12, item S220; page 23, line 4, item S455 and line 17, item S585. Correction is required.
9. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: "14" in fig. 1; "100,101,102,103,104 " in fig.6; "S540" in fig.7; "S200" in fig.18; "S350" in fig. 20 and "21a, 20,21b, 22,23 and 24" in fig.4. Correction is required.

Claim Rejections - 35 USC § 112

10. **Claim 33** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. **Claim 33** recites the limitation "the state of the entire header" in the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

12. **Claims 20, 22-27 and 29** are rejected under 35 U.S.C. 102(e) as being anticipated by Kato (6,381,331B1).

As per claims 20, 23 and 25 Kato (6,381,331B1) teaches a protocol, digital content encryption apparatus of the digital content transmission system (see abstract) comprising: a protocol format generator generating a copyright protection protocol (see fig.7, 10 and 13), said copyright protection protocol including a header (see fig.15) and digital contents (see fig.15), said digital contents being encrypted (see col.3, lines 65-67), said header having information for decrypting and explaining the digital contents (see col.3, lines 61-64; col.4, lines 5-11); and a protocol format decoder having decryption algorithm (see abstract and col.col.3, lines 40-43), using key information said

Art Unit: 2132

protocol format decoder decrypting (see col.6, lines 17-22) and replaying the digital contents according to the information of the header received from the protocol format generator (see col.11, lines 22-27). Also see col.1, lines 47-65 and col.2, lines 1-35.

As per claims 22 and 24 Kato (6,381,331B1) teaches the apparatus of claims 20 and 23 wherein the protocol format decoder generates a user key by adding key information to key generation algorithm and decrypts a temporary validation key by using the user key, said protocol format decoder decrypting the encrypted digital contents with the temporary validation key, said key information being formed to correspond to identity characters of a user (see col.11, lines 13-27 and fig.14).

As per claim 26 Kato (6,381,331B1) teaches the protocol of claim 25, further comprising a field for indicating the size of the encrypted digital contents, and an additional information field (see col.3, lines 65-67).

As per claim 27 Kato (6,381,331B1) teaches the protocol of claim 25, wherein the header comprises a copyright support field for indicating whether the digital contents are under copyright protection, an unencrypted header field, and an encrypted header field (see col.5, lines 9-27 wherein h represent unencrypted header field 1, and key information field 2 is encrypted header field and the data block is the encrypted payload or content field protected by encryption).

Art Unit: 2132

As per claim 29 Kato (6,381,331B1) teaches the protocol of claim 27, wherein the unencrypted header field comprises a copyright library version field (see fig. 11-12), a digital content conversion format field, a key generation algorithm field (see col.3, line 63), a digital content encryption algorithm field (see col.37-41), a field for indicating user authorization information at PC (see col.9, lines 11-13 wherein key information field consist of field2 registration of the user and paid key and col.22-30), and a field for indicating user authorization information at a replaying device (see col.11, lines 13-17 wherein the authorization field is send to user and lines 24-27 wherein the pay field which is the user authorization at replaying device enable the reconstruction of the original content).

Claim Rejections - 35 USC § 103

13. **Claims 21, 28 and 33** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato (6,381,331B1) in view of Ginter et al (5,910,987A).

As per claims 21 and 33 Kato (6,381,331B1) teaches all limitation of the claims as applied to claims 20 and 22 but do not disclose explicitly calculates a hash value by adding the user key to hash algorithm, said header including user authorization information with the hash value. However Ginter et al (5,910,987A) teach calculating a hash value by adding the user key to hash algorithm (see col.213, lines 34-59), said header including user authorization information with the hash value (see col.156, lines 19-27; col.155, line 15-16 and col.213, lines 34-59). It would have been obvious to one

Art Unit: 2132

of ordinary skilled in the art at the time the invention was made to utilize Ginter et al (5,910,987A) in kato's header field's method in order to have a secure transaction management and electronic rights protection.

As per claim 28 and 30 Kato (6,381,331B1) teaches the protocol of claim 25, wherein the header comprises a copyright support field for indicating whether the digital contents are under copyright protection, an unencrypted header field (see col. 5, lines 9-27) but do not disclose explicitly, a field for indicating the size of the unencrypted header field, an encrypted header field, a field for indicating the size of the encrypted header field and field showing the number of users. However Ginter et al (5,910,987A) teach a field for indicating the size of the unencrypted header field (see col.135, lines 29-32; fig.22 and col.154, lines 3-5), a field for indicating the size of the encrypted header field (see col.135, lines 29-32; fig.22 and col. 154, lines 3-5) and a field showing the number of users (see col. 135, lines 17-22; col.156, lines 46-55). It would have been obvious to one of ordinary skilled in the art at the time the invention was made to utilize Ginter et al (5,910,987A) in kato's header field's method in order to have a secure transaction management and electronic rights protection.

Allowable Subject Matter

14. **Claims 31 and 32** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

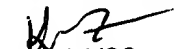
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kambiz Zand whose telephone number is (703) 306-4169. The examiner can normally be reached on Monday-Thursday (8:00-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (703) 305-1830. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

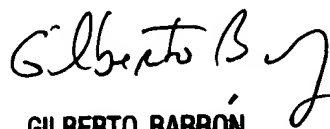
After-Final (703) 746-7238

Official (703) 746-7239

Non-Official/Draft (703) 746-7240

Kambiz Zand


04/14/03


GILBERTO BARRON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100